

Date: Thursday, 1/25/2007 10:21:40 AM
User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : LUG WELDMENT
Job Number : 30454	
Estimate Number : 12116	
P.O. Number : N/A	Part Number : D335313
This Issue : 1/25/2007 S.O. No. : N/A	Drawing Number : D3353 REV. A
Prsht Rev. : NC	Project Number : N/A
First Issue : N/A Type : LARGE FAB ASSY	Drawing Revision : A
Previous Run : 30174	Material : N/A
Written By : <u>[Signature]</u>	Due Date : 2/1/2007
Checked & Approved By : <u>[Signature]</u>	Qty: 8 Um: Each
Comment : est rev A 06.01.26 new issue EC	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
----------------	------------------------------	----------------------

1.0	M1018TR1250W109	1010-1025 Steel Tubing
-----	-----------------	------------------------



Comment: Qty.: 0.9188 f(s)/Unit Total : 7.3500 f(s)



AISI 1018-1025 mild steel seamless round tubing

1.250" od X 0.109" wall

batch: ~~14103211~~ M103211

7/2/07/02/01

8

2.0	BAND SAW	BAND SAW
-----	----------	----------



Comment: BAND SAW

Cut blank 10.50" long as per dwg D3353

7/2/07/02/01

8

3.0	MILLING CONV.	CONVENTIONAL MILLING MACHINE
-----	---------------	------------------------------



Comment: CONVENTIONAL MILLING MACHINE

1- Drill & tap as per dwg D3353

2-Deburr as per dwg D3353

7/2/07/02/01

8

4.0	QC5	INSPECT WORK TO CURRENT STEP
-----	-----	------------------------------



Comment: INSPECT WORK TO CURRENT STEP

7/2/07/02/01

8

5.0	PACKAGING 1	PACKAGING RESOURCE #1
-----	-------------	-----------------------



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

7/2/07 (8)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☐ No ☒ DQA: 12 Date: 07/02/05
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 1/25/2007 10:21:40 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: LUG WELDMENT

Job Number: 30454

Part Number: D335313

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC21

FINAL INSPECTION/W/O RELEASE



(8)

Comment: FINAL INSPECTION/W/O RELEASE

1/25/07/02/05

Job Completion



u 07 02.02

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

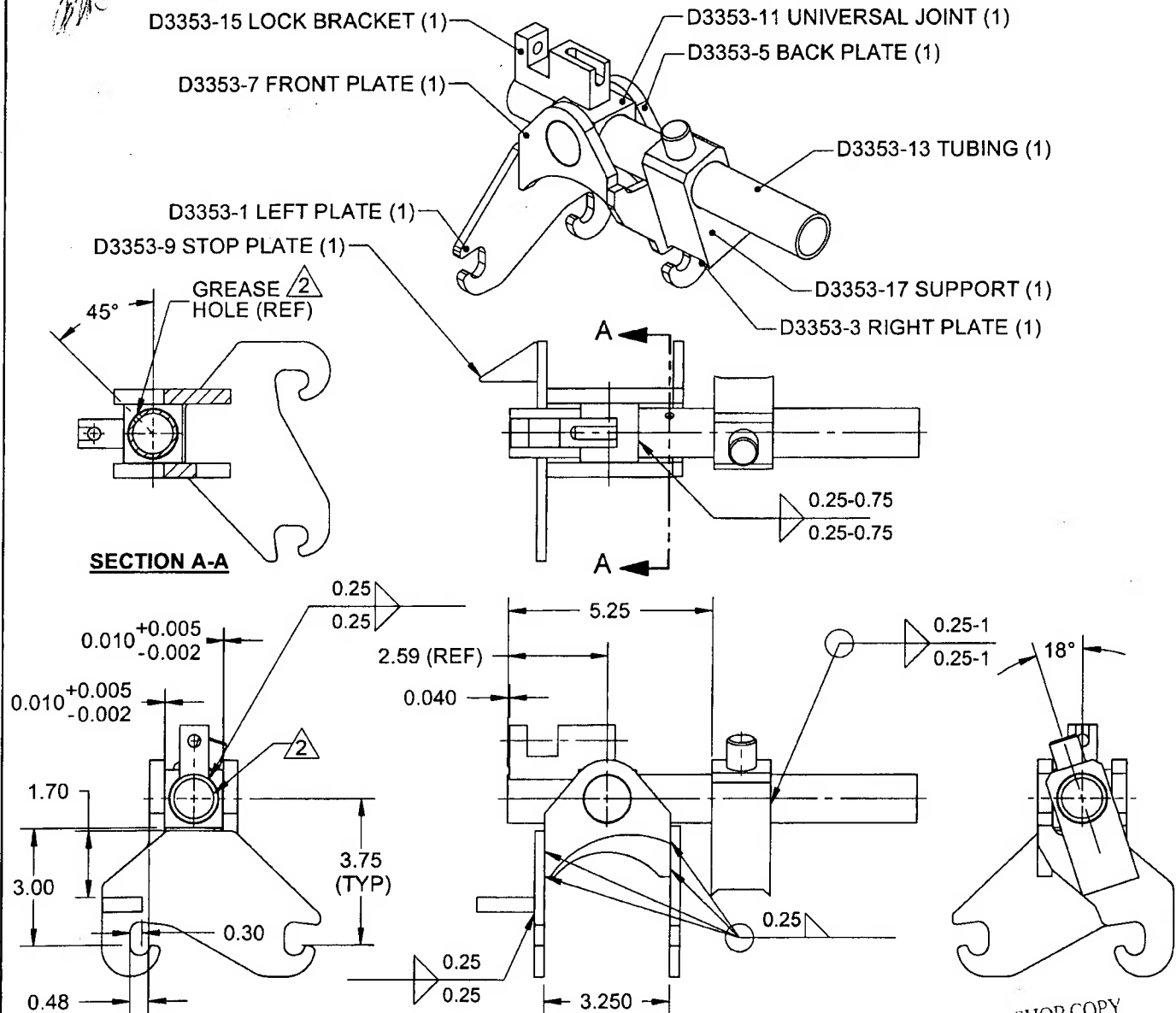
QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN REF	DRAWN BY REF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3353	REV. A SHEET 1 OF 10
DATE 04.12.14		TITLE LUG WELDMENT	SCALE 1:4
A	04.12.14	NEW ISSUE	

RELEASED
[Handwritten: 35/5/09]**D3353-041 LUG WELDMENT****NOTES:**

- 1) WELD PER DART QSI 004
- 2) COVER INSIDE HOLES PRIOR PAINTING
- 3) FINISH: POWDER COAT PAINT FIRE RED (4.3.5.10) PER DART QSI 005 4.3 WITHOUT NOTICE
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) BREAK ALL SHARP EDGES 0.010 TO 0.020

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WORK ORDER
NO. *30454*

COPYRIGHT © 2004 BY DART AEROSPACE LTD.

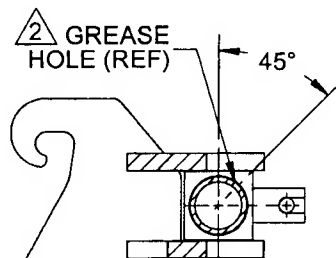
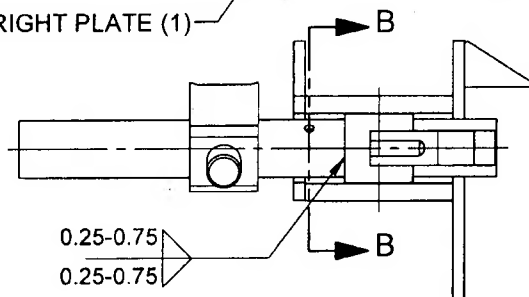
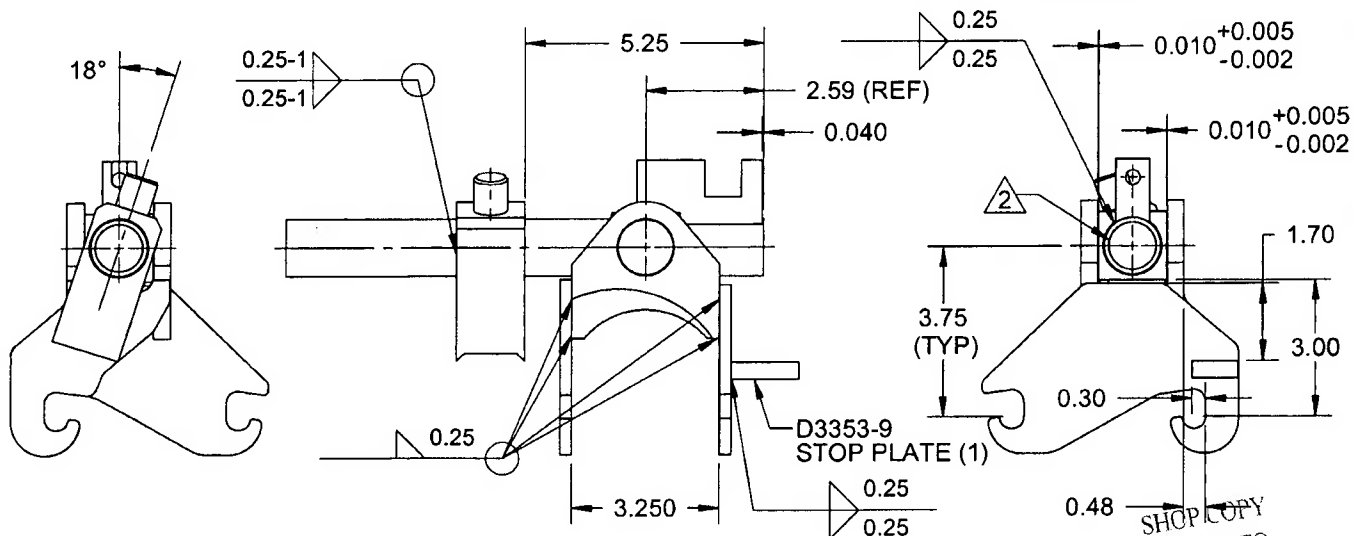
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

DART

DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. D3353	REV. A SHEET 2 OF 10
DATE 04.12.14	TITLE LUG WELDMENT		SCALE 1:4

RELEASED
06/02/59

D3353-11 UNIVERSAL JOINT (1)
D3357-5 BACK PLATE (1)
D3353-15 LOCK BRACKET (1)
D3353-7 FRONT PLATE (1)
D3353-17 SUPPORT (1)
D3353-13 TUBING (1)
D3353-3 RIGHT PLATE (1)
D3353-1 LEFT PLATE (1)

**SECTION B-B****D3353-042 LUG WELDMENT****NOTES:**

- 1) WELD PER DART QSI 004
- 2) COVER INSIDE HOLES PRIOR PAINTING
- 3) FINISH: POWDER COAT PAINT FIRE RED (4.3.5.10) PER DART QSI 005 4.3
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) BREAK ALL SHARP EDGES 0.010 TO 0.020

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 30454

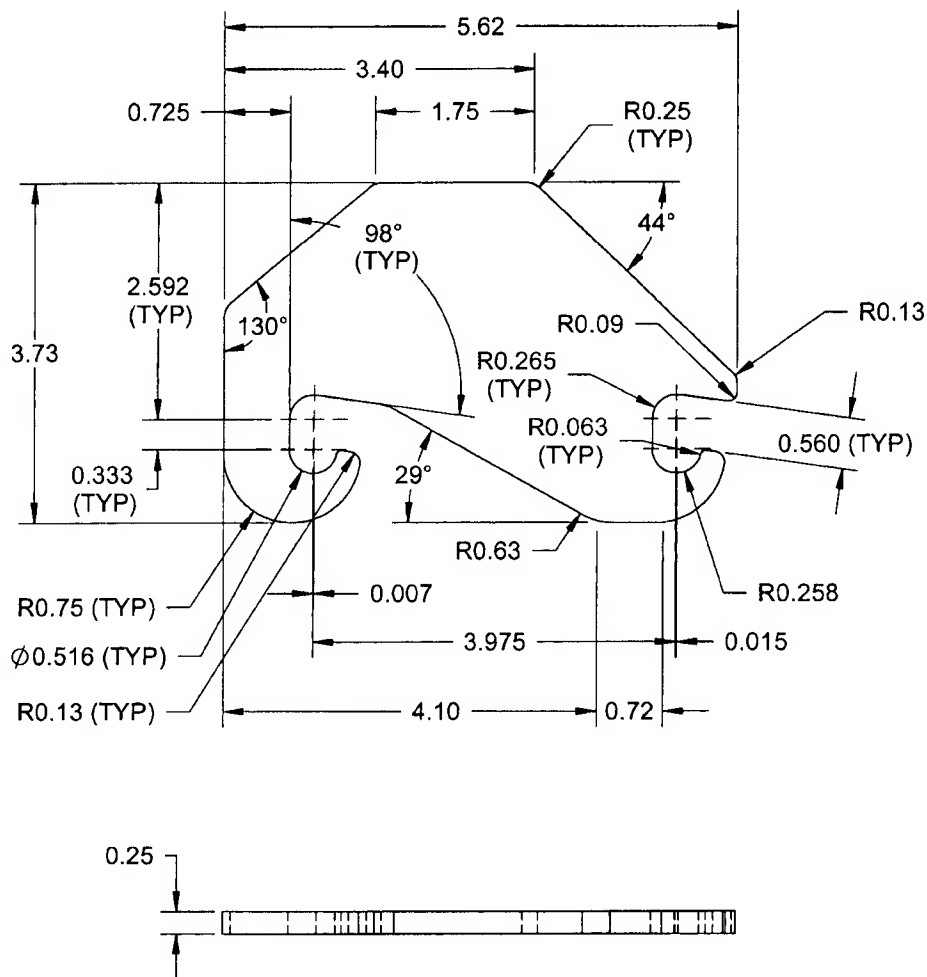
COPYRIGHT © 2004 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3353	REV. A SHEET 3 OF 10
DATE 04.12.14		TITLE LUG WELDMENT	SCALE 1:2

RELEASED
01/07/14



D3353-1 LEFT PLATE

NOTES:

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 3 GAUGE (0.250 THICK)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.010 TO 0.020

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 30454

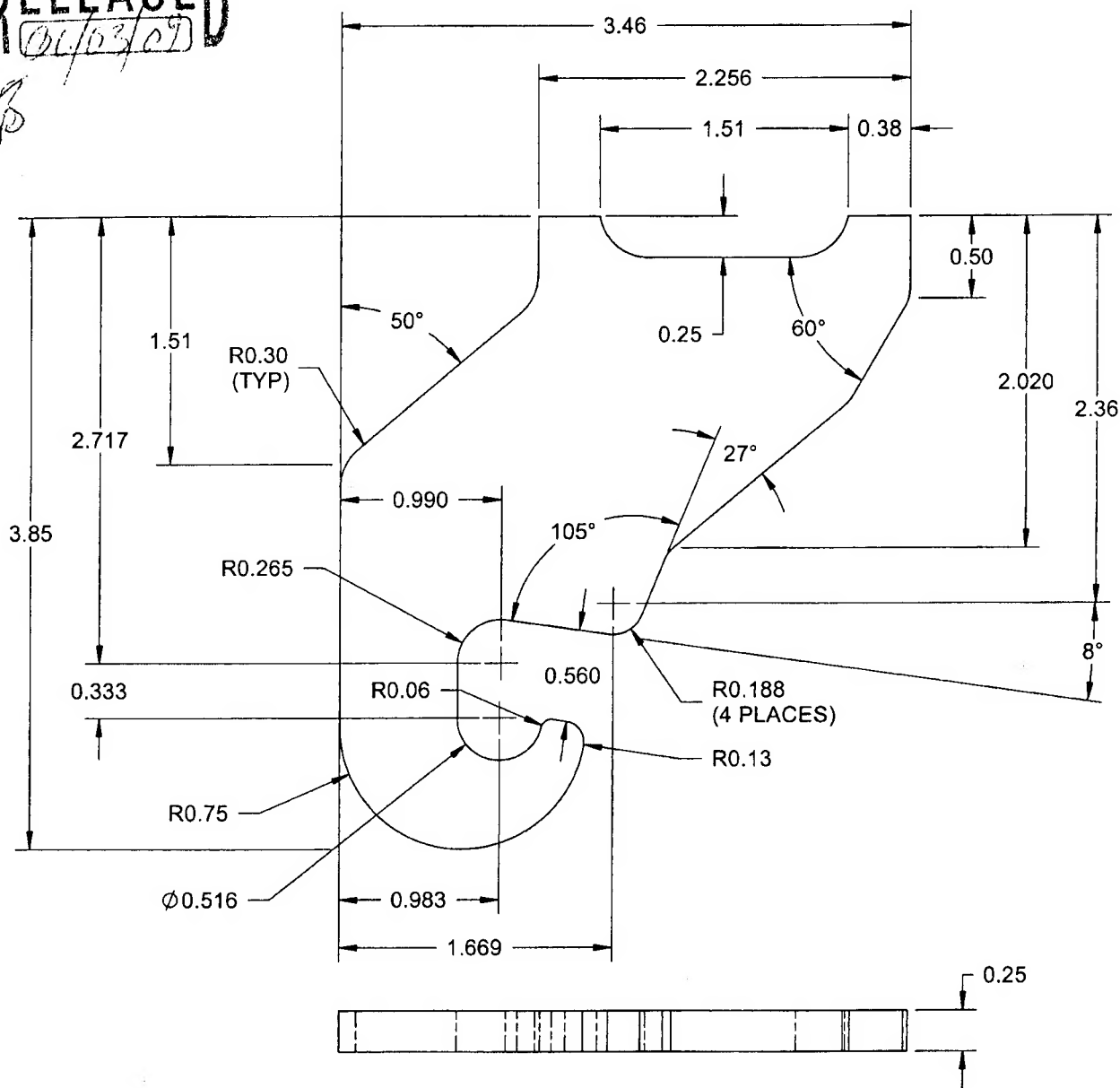
COPYRIGHT © 2004 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. D3353	REV. A SHEET 4 OF 10
DATE 04.12.14	TITLE LUG WELDMENT		SCALE 1:1

RELEASED
01/03/07



D3353-3 RIGHT PLATE

NOTES:

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A108 OR CSA G40.21, 38W/44W/50W/60W/70W SERIES STEEL 3 GAUGE (0.250 THICK)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.010 TO 0.020

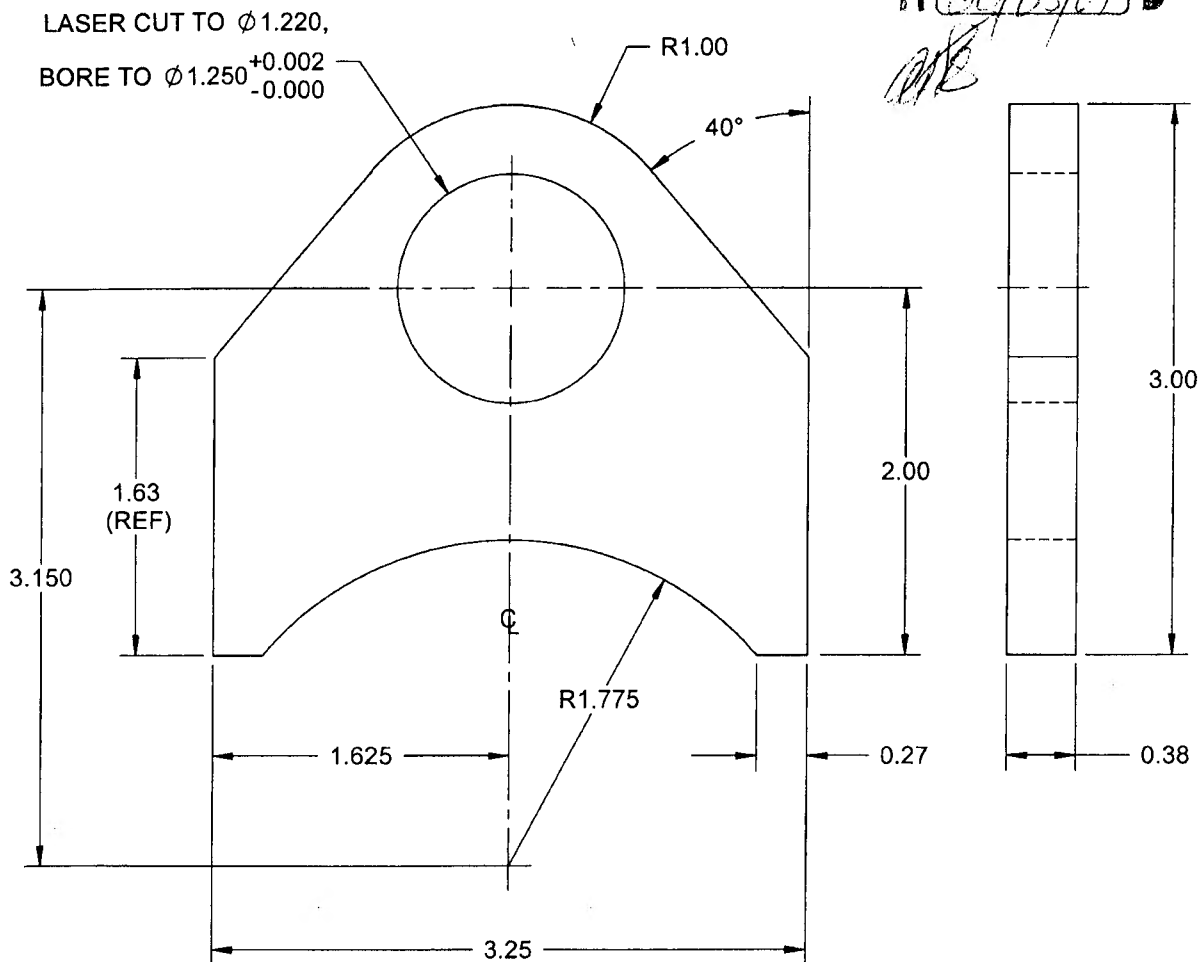
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 30454

COPYRIGHT © 2004 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

DART

DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3353	REV. A
DATE 04.12.14	TITLE LUG WELDMENT		SHEET 5 OF 10
		SCALE 1:1	

**D3353-5 BACK PLATE****NOTES:**

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A108 OR CSA G40.21, 38W/44W/50W/60W/70W SERIES STEEL 0.375 THICK PLATE
MIN. ULTIMATE TENSILE STRENGTH = 42 ksi
MIN. YIELD TENSILE STRENGTH = 28 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.010 TO 0.020

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. **30454**

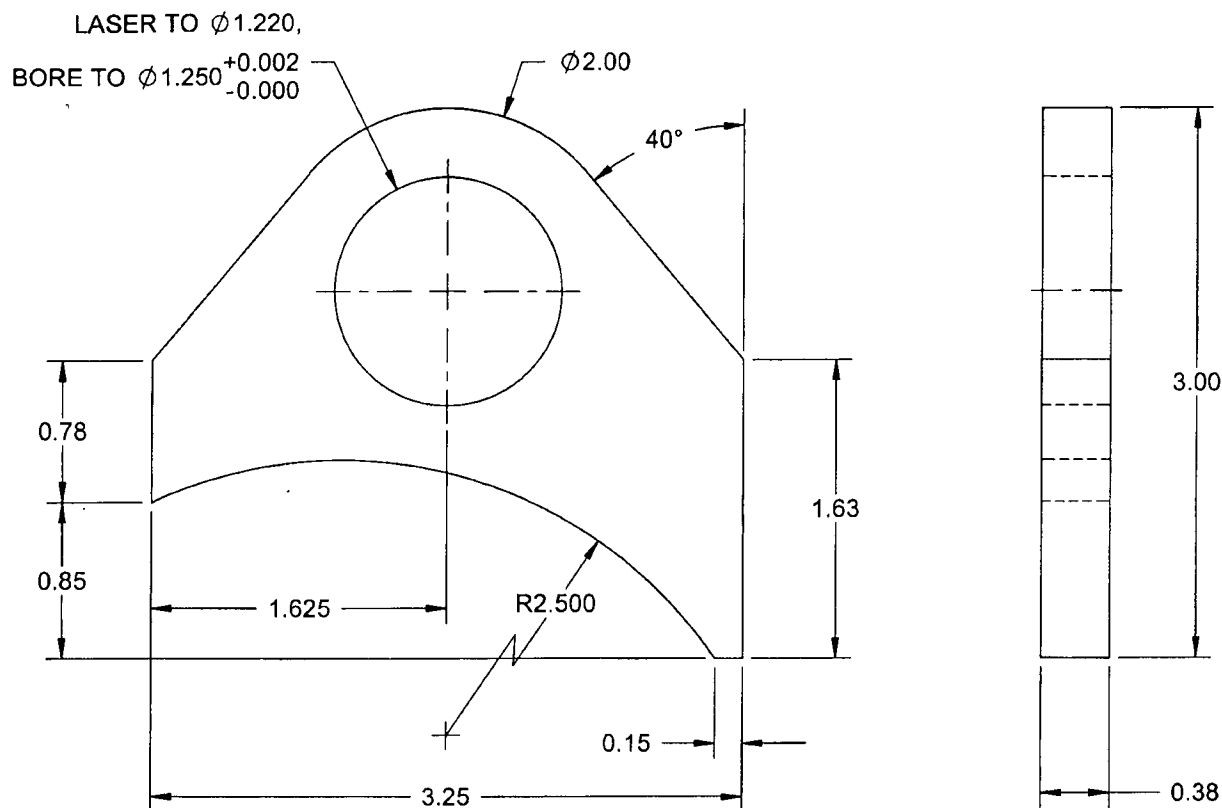
COPYRIGHT © 2004 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO. D3353	REV. A
DATE 04.12.14		TITLE LUG WELDMENT	SHEET 6 OF 10 SCALE 1:1

RELEASED
06/01/07



D3353-7 FRONT PLATE

NOTES:

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A108 OR CSA G40.21, 38W/44W/50W/60W/70W SERIES STEEL 0.375 THICK PLATE
MIN. ULTIMATE TENSILE STRENGTH = 42 ksi
MIN. YIELD TENSILE STRENGTH = 28 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.010 TO 0.020

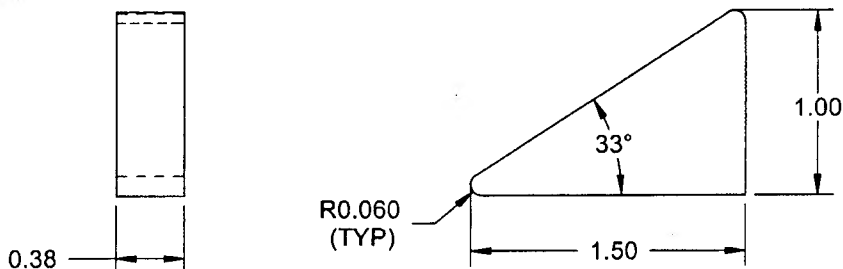
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 30454

COPYRIGHT © 2004 BY DART AEROSPACE LTD.

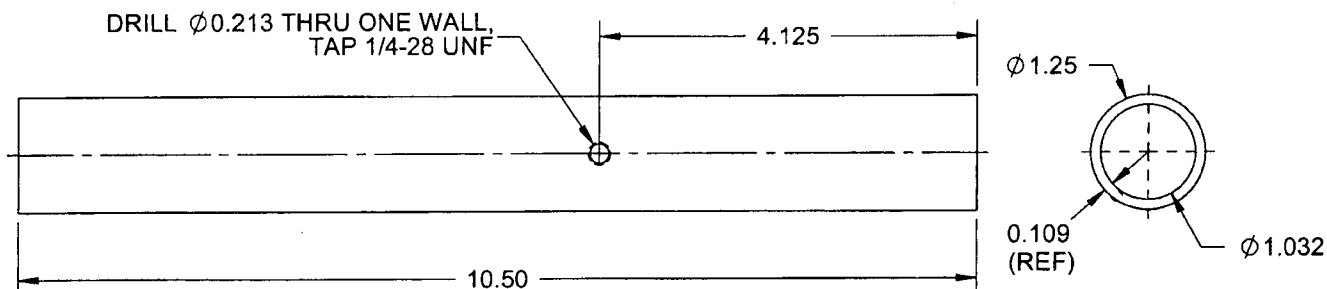
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

DART

DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3353	REV. A SHEET 7 OF 10
DATE 04.12.14	TITLE LUG WELDMENT		SCALE 1:1

RELEASED
[Signature]
3/3/04**D3353-9 STOP PLATE**

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A569/A570 OR
CSA G40.21, 38W/44W/50W/60W/70W, 0.375 THICK
MILD STEEL BAR (REF. DART SPEC. M1010-B)

**D3353-13 TUBING****NOTES:**

- 1) MATERIAL: MIL-T-5066 OR ASTM A513-00 MT1020 SRA OR AMS 5075 OR AMS 5077,
Ø1.250 x 0.125 WALL, COLD DRAWN STEEL TUBING
(REF. DART SPEC. M1020TR1.250W.109)

NOTES:

- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
3) ALL DIMENSIONS ARE IN INCHES
4) BREAK ALL SHARP EDGES 0.010 TO 0.020

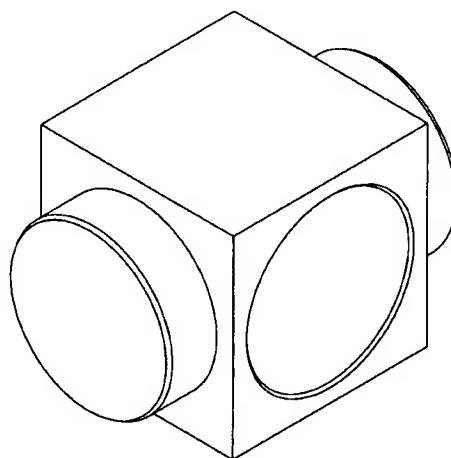
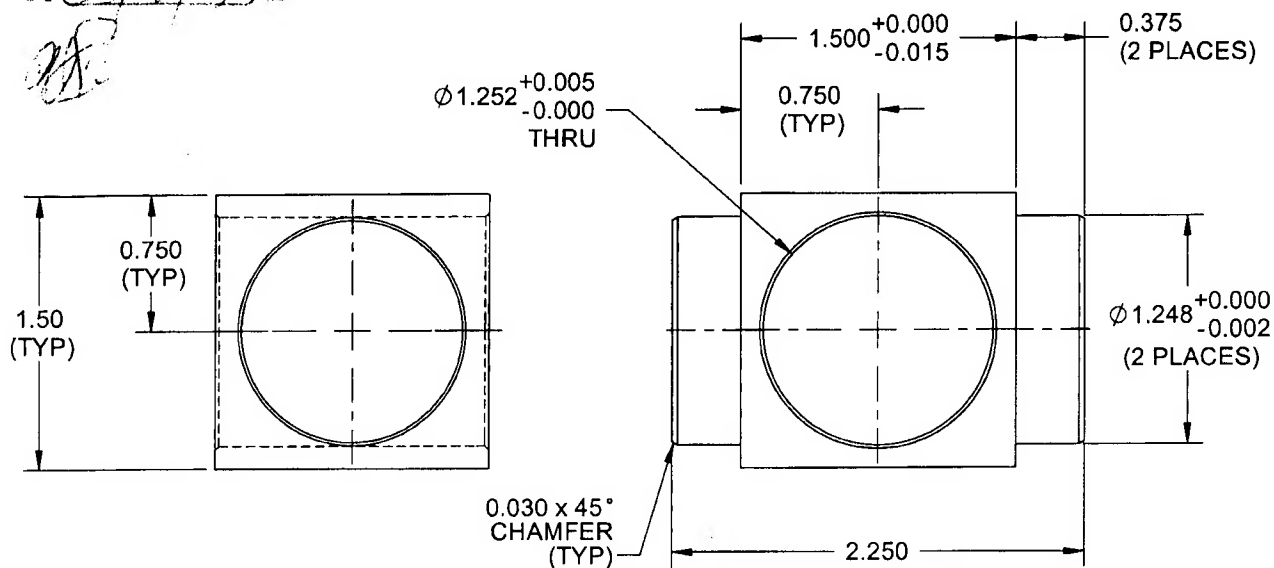
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. **30454**

COPYRIGHT © 2004 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

DART

DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED \$	APPROVED <i>[Signature]</i>	DRAWING NO. D3353	REV. A SHEET 8 OF 10
DATE 04.12.14	TITLE LUG WELDMENT		SCALE 1:1

RELEASED
04/30/09**D3353-11 UNIVERSAL JOINT****NOTES:**

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A569/A570 OR CSA G40.21, 38W/44W/50W/60W/70W, 1.50 SQUARE MILDN CONTROLLED COPY STEEL BAR (REF. DART SPEC. M1010-B)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.010 TO 0.020

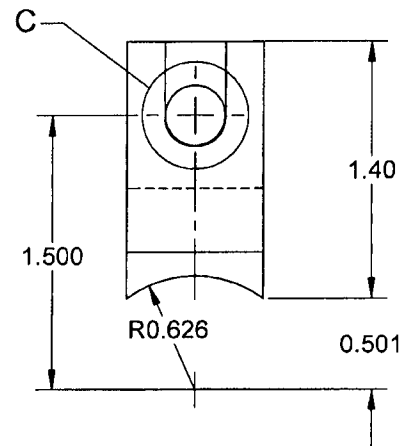
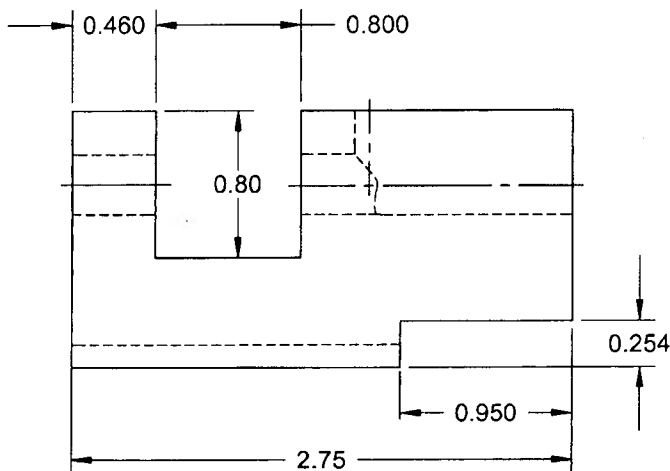
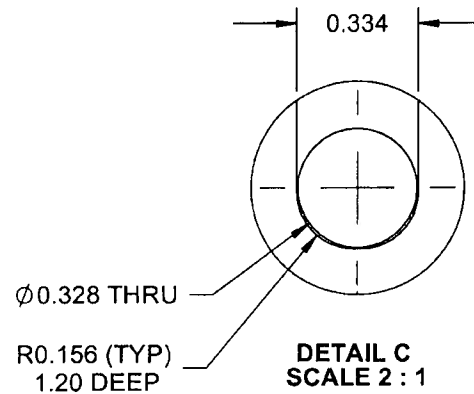
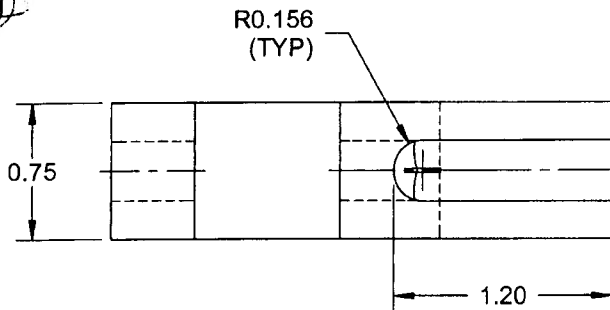
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. **30454**

COPYRIGHT © 2004 BY DART AEROSPACE LTD.

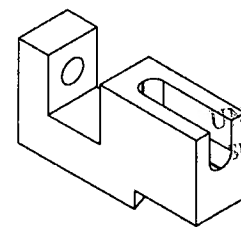
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

DART

DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. D3353	REV. A
DATE 04.12.14	TITLE LUG WELDMENT		SHEET 9 OF 10 SCALE 1:1

RELEASED
06/03/09**D3353-15 LOCK BRACKET****NOTES:**

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A569/A570 OR CSA G40.21, 38W/44W/50W/60W/70W, 0.75 THICK MILD STEEL BAR (REF. DART SPEC. M1010-B)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.010 TO 0.020

**ISOMETRIC VIEW**
SCALE 1 : 2

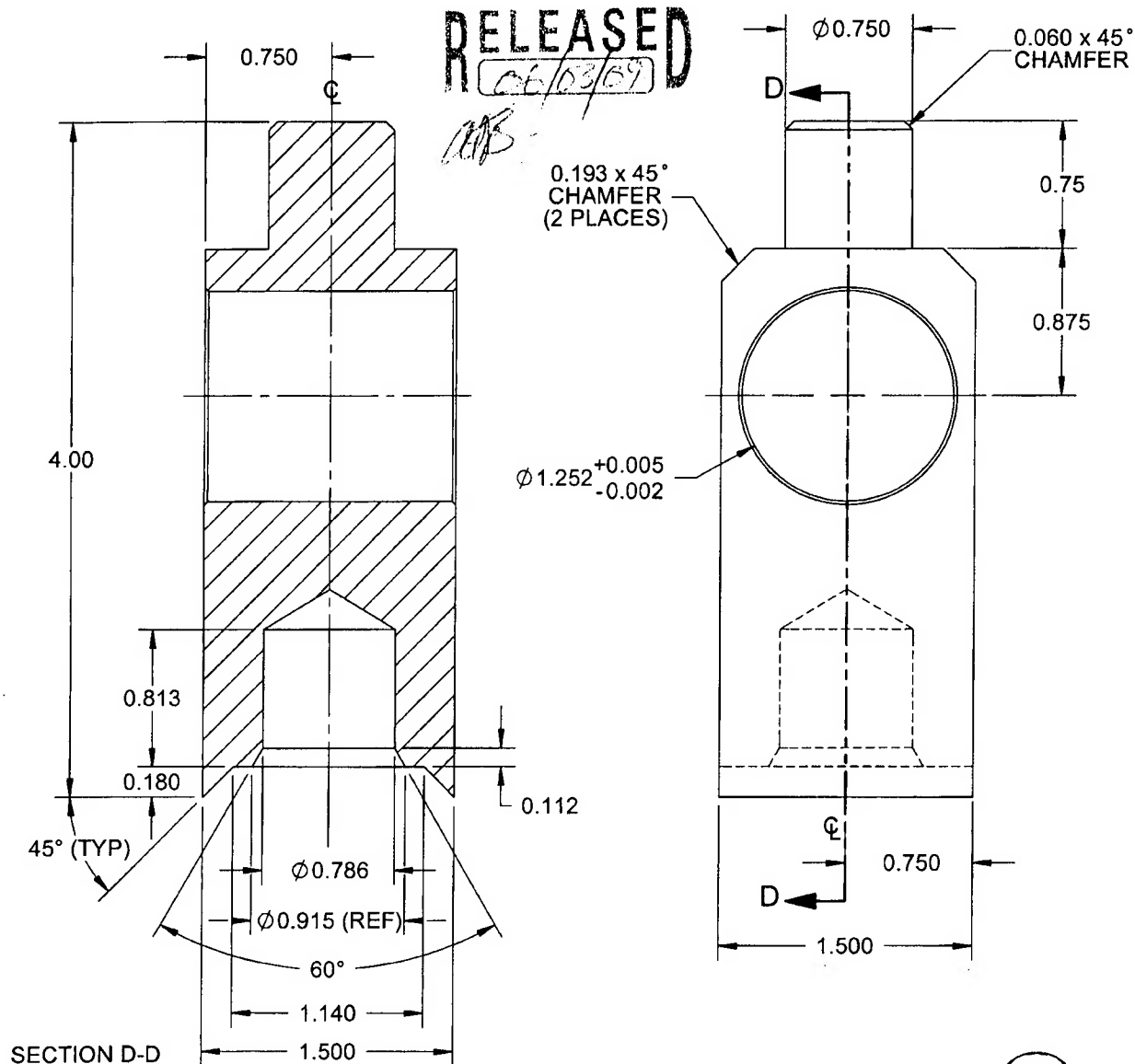
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 30454

COPYRIGHT © 2004 BY DART AEROSPACE LTD.

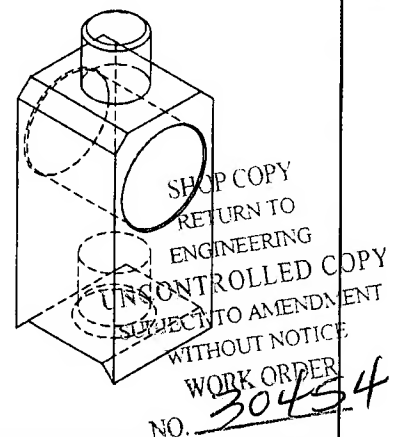
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

DART

DESIGN RF	DRAWN BY RE	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3353	REV. A
DATE 04.12.14	TITLE LUG WELDMENT	SHEET 10 OF 10 SCALE 1:1	

**D3353-17 SUPPORT****NOTES:**

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A569/A570 OR CSA G40.21, 38W/44W/50W/60W/70W, 1.50 SQUARE MILD STEEL BAR (REF. DART SPEC. M1010-B1.500x01.500)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.010 TO 0.020

**COPYRIGHT © 2004 BY DART AEROSPACE LTD.**

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.